Department of Foreign Affairs and International Trade
Trade Commissioner Service

Ministère des Affaires étrangères et du Commerce international
Service des délégués commerciaux

Canada

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Market for Agriculture and food biotechnology products In Thailand

I. Introduction

This report attempts to describe the agriculture and food sector in Thailand as it relates to the use of biotechnology products, trends and developments and potential opportunities for Canadian companies in the biotechnology industry. In addition to this market study, there are also two companion market studies that can be found on the Canadian Embassy, Bangkok website:

- The Biotechnology Sector in Thailand
- The Market for Imported Diagnostic Kits in Thailand

II. Industry segments with good market prospects

Based on the current state of the agriculture and food industry in Thailand and projected future trends, it is anticipated that the following market segments offer the best prospects for Canadian suppliers in the years ahead.

- **Livestock:** Semen especially for upgrading dairy herds. In the animal health sector, antibiotics, vaccines, medicinal/nutritive feed additives and anthelminitcs are seen as growth products.
- **Feed industry:** Most feed ingredients are bulk plant commodities, however, these are deficient in essential nutrients. Bulk amino acids, enzymes, hormones, vitamins, antibiotics and other ingredients must be added to the feed ration. The market in Thailand for feed additives is large and many must be imported. Most of these products are produced by fermentation; another approach is modifying bulk feed ingredient crops – an approach not possible in Thailand in the present climate. While Thailand produces a small number of feed additives, the opportunity exists for supplying technology for their production.

  Digestive enzymes such as phytase are added to cereal grains to improve the availability of phosphorous in poultry and pig diets and to assist in fiber digestibility. Addition of β-glucanase and arinoxylase enzymes in cereal based broiler diets can improve weight gain and food conversion efficiency. These products are not produced in Thailand, but may find opportunity in an industry desperate to improve its efficiency and reduce costs.
- **Pesticides:** There is increasing interest toward microbial pesticides, some of which are being developed in Thailand, others are being evaluated.
- **Bio-fertlizers**: Organic based fertilizers using nitrogen-fixing bacteria also have potential in a country that uses 6 million tons of chemical fertilizers each year.
- **Food Ingredients:** The rapid expansion of the local food processing industry has stimulated greater demand for food additives. The total market value is estimated at about C$320 million in 1999 with most advanced additives being imported. Opportunities exist for companies supplying more advanced additives that require a high level of experience and expertise in formulation, higher technology and substantial capital investment.

III. Background on major sectors

Following is a description of the major sectors of the agriculture and food industry as they relate to biotechnology.

1. Agricultural Crops

Thailand has been forced into adopting a no GMO policy and accordingly GMO seed cannot be imported or grown in the country for commercial use. GMO products can only be imported for experimental purposes. This position mirrors that of two of Thailand's main trading partners – Europe and Japan.

In the longer term, given the key role of agriculture in Thailand, the situation may well be reversed, opening the market for modified seeds. When and if, this change will occur depends on the policy position in Europe and Japan and public opinion in Thailand.

Pressure is mounting to lift the ban on field trials of genetically modified plants as proponents claim that it has obstructed Thai farmers' attempts to increase yields. Government organizations are concerned that Thailand will lose its competitiveness in agricultural trade if the country does not embrace genetic engineering technology; they also feel that sufficient safety nets are in-place.

For products sold in Thailand, FDA has already approved a labeling law for GM products, which by early 2002 was awaiting final government approval. The draft states that a product must be labeled if its overall ingredients or one of its three main ingredients contained more than 5 per cent of GM material. Labeling of products as being GM-free is not allowed.

Following are the seed requirements for major crops and the volume and value of vegetable seed exports (2000 estimates). Seed exports represent about 60% of the total seed production in Thailand. The seed market is worth about C$43 million/year.

Table 1. Seed (sowing) requirement, 2000 estimates

Crop	Seed requirement (ton)
Rice	900,000
Corn	25,000
Sorghum	2,000
Mung beans	580
Soybeans	11,000
Groundnuts	11,000
Cotton	580

Table 2. The Volume and Value of Vegetable Seed Exports - 2000

Seed Type	Volume (ton)	Value (baht)
Tomato	48	322,041,657.92
Corn	4808	268,415,047.35
Chili	17	130,345,323.58
Morning glory	2473	99,955,065.39
Cucumber	27	82,877,859.79
Cabbage	9	33,994,881.54
Long bean	83	12,092,183.10
Sweet corn	63	5,615,275.60
Pak Choy	30	4,847,921.30
Radish	26	4,109,296.10
Cauliflower	0.8	3,913,434.08
Coriander	38	3,172,738.70
Broccoli	0.3	1,855,769.60
Chinese Cabbage	5	1,639,765.76
Soybean	12	1,440,000.00
Mustard Green	7	1,422,720.60
Lettuce	8.5	1,419,038.50
Kale	5	844,011.00
Green pea	49	689,495.57
Sorghum	0.6	39,316.00
Mung bean	0.4	26,516.16
Total	**7710.6**	**980,757,317.64**

Source: Agricultural Regulatory Division

Total seed volume used in Thailand is approximately 1.3 million tons and seed exports about 7.8 million tons. Rice seed accounts for about 70% of the total domestic seed requirement. Private companies dominate the vegetable seed market and a proportion, about 50, export vegetable seeds from Thailand. The leading player at the moment is Chia Tai Co Ltd, which in 2000 generated C$5.3 million from export sales. This accounted for a 13-per cent share of the market.

About 25% of the total seed used in Thailand is distributed through the seed market; the remaining 75% is farmer saved seed. The provision of seed by the public sector accounts for about 5% of the total seed supply. The remaining 20% comes from seed companies of which there are about 130. About 3% of the seed from private companies is imported, especially vegetables seed (2000, C$13.5 million).

Opportunities: Crops in Thailand are subjected to many diseases, insect pests and abiotic stress. As much as 50–90% of some crops can be lost to bacterial wilt. Improved seeds should be endowed with resistance to diseases and insect pests, earliness, and better keeping quality and transportability. Varieties for abiotic stress are also required. Insect infestations include brown plant hoper/gall midge. One of the major constraints in rice cultivation is blast disease. As Thailand has become less dependent on imported seeds, its exports have grown and are expected to continue to follow this trend.

Opportunities for improved vegetable seeds in Thailand are:

Tomato:	Heat tolerance, bacterial wilt resistant, late blight resistant, and leaf curl virus resistant
Chinese cabbage:	Heat tolerance, and soft rot resistant
Leaf mustard:	Heat tolerance
Cauliflower:	Heat tolerance
Cruciferous vegetables:	Diamond back moth resistant
Lettuce:	Tip burn and late blight resistant
Cucumber:	Downy mildew disease resistant
Pepper:	Chilli vein-banding mottle virus (CVbMV), cucumber mosaic virus (CMV) and pepper leaf curl virus resistant
Potato, ginger and peanut:	Bacterial wilt resistant
Papaya:	Ringspot virus resistant

2. Livestock & Poultry

Although there have been no official directives by the European Union or Japanese government on the requirement of a certificate of GMO-Free or non-GMO products for Thai broiler meat, trade sources report that some private importers in these two countries have begun to request such certificates. Thai exporters are concerned that this may be the first step leading to official requirements in the future.

In addition, some clients in the EU reportedly have begun to require that broiler meat must originate from farms which meet the conditions of (a) no use of animal protein ingredients; (b) no use of growth promoters; and (c) free of antibiotics. Meanwhile, some clients in Japan have similar conditions.

Thailand is home to 3 million buffalos, 4 million cattle, 15 million swine, 970 million chickens and 22 million ducks. During the past few years Thailand's beef cattle population has declined, due mainly to the heavy slaughter of female cattle. The rebuilding of herds may take time and will be characterized in terms of quantity, not quality.

Imports of breeding beef cattle into Thailand virtually disappeared in recent years because of an unfavorable domestic market. Thailand continues to be a promising market for beef semen, a less expensive way to upgrade genetics of the domestic cattle herd. This will continue to be a promising area for sometime even though Thailand is strengthening its artificial insemination research centers to help the country improve cattle reproduction and reduce semen imports. Average annual demand for frozen semen is about 650,000 vials, of which 310,000 are for dairy cattle and the rest for beef cattle. Annual production from Thailand's three centers, one each in Chiang Mai, Lop Buri and Khon Kaen is about 580,000 vials of frozen semen. Production fluctuates with demand and in some years has been as high as one million vials.

The dairy cattle population is about 300,000, located mostly in central Thailand. Total milk production was 528,000 tons in 2000, about 44% of the total milk demand of 1.2 million tons. Thai milk consumption remains low at about 12-liters/person/year. Milk production is still insufficient to meet local demand, and Thailand has to import more than 50 percent of dairy products consumed in the country. To meet the national demand, it is estimated that the country requires an additional 130,000 dairy cows, assuming present productivity. The government has selected the dairy industry as a priority sector for future development.

After a sharp reduction in 1998, Thailand's hog production showed signs of recovery in 1999 and 2000. The number of sows in the country has increased from 630,000 head (1998) to 660,000 (1999) and 730,000 (2000). Large independent farms and integrated farm operations have mostly generated the expansion. Large independent farms are mostly farrow-to-finish farms, while the integrated farm operations are directly linked with large feed mills. Currently, about 80-85% of total production is derived from large farms and integrated feed mill companies, with the rest from small independent producers. In 2000 exports of Thai pork were C$21.5 million, up from C$15 million the previous year. Exports could double to C$43 million in 2002.

Thailand processes 18 million chickens a week, of which 12 million are exported. In 2002 forecasts suggest that 970 million chickens will be processed. The country exported 437,000 tons of fresh and frozen chicken in 2001, up from 310,000 ton in 2000. Domestic consumption of chicken is about 690 million tons. In 2000, Thailand exported 8,500 tons of chilled and frozen duck valued at C$23 million. This year, duck meat exports are expected to rise by 6 per cent to about 9,000 metric tons valued at C$25 million. In total, Thailand produces 18,450 tons of duck each year.

Private companies contract farmers who rear poultry and swine under intensive conditions. Most poultry and swine farmers (60-70%) are under contract and use company feeds, breeding material and other inputs. Very few farmers mix their own feeds. If artificial insemination is used it is supported and controlled by the company. Beef and dairy cattle production is a semi-intensive farmer directed activity. Artificial insemination is widely practiced and supported and serviced by officers from the Department of Livestock Development (DLD) and Dairy Farming Organization (DFO). Distribution of biotechnology related animal health products and breeding material should be through the large companies or relevant government organizations. There are a limited number of distributors for these products.

Opportunities: The main opportunities in this sector are in the prevention, treatment or diagnosis of animal health problems and in the improvement of breeding stock.

Heat and humidity are a constant problem for livestock farming in Thailand and are severely intense most of the year. Low conception rate, decreased production, as well as feed intake are the inevitable outcomes. The industry is also disadvantaged in terms of low quality roughage, and occasionally rampant incidences of infectious diseases. Most farms are small-scale and not able to install adequate facilities. The large operations (especially poultry processors) have started to make extensive use of cooling systems for their sheds.

Neither dairy cattle nor dairy farming is indigenous to Thailand and its people. The national average milk yield is low at around 8-9 kg/cow/day. It is not uncommon to find a herd with an average milk yield of 5,000-6,000 kg/lactation.

Maintaining the health of livestock is one of the most important problems among commercial farms in

Thailand. This has led to greater use of vaccines and drugs. Foot and Mouth disease is endemic to Thailand, especially its cattle, pig, sheep and goat population. Newcastle disease is a disease of poultry prevalent in Thailand.

Apart from FMD and Newcastle disease several other diseases of cattle, swine and poultry are of particular importance in Thailand. For example, Swine Fever and Aujeszky's disease are important viruses affecting pigs. The incidence of all diseases has increased in recent years.

Annually, about 68,000 goats, 38,000 sheep, 5 million buffalo, 14 million cattle and 3 million swine are vaccinated. Imports of vaccines for veterinary medicine (HS 3002300007) amounted to C$40 million in 1999.

3. Animal feed

The presence of genetically modified organisms in various imported grains and animal feed particularly in soybean and corn imports has caused a great deal of concern for Thailand. Feed millers are seeking to identify new sources of feed raw material that are GMO free.

Key components of the food processing industry are meat and dairy products. As a result of growth among these components the livestock and dairy industries have also been growing rapidly. As producers are searching for more efficient means of animal rearing, the demand for higher quantities and better quality feeds in Thailand is also increasing.

There are 2 types of locally produced animal feed:

- *Concentrate. Mixed and ready-made concentrated ingredients, which farmers mix with other raw materials in a proportion specified by the factories.*
- Ready-mixed animal feed. This is the animal feed readily mixed by the factories and is therefore ready for use by livestock farmers.

The major segments for animal feeds are pigs and poultry, as well as shrimp, dairy cattle and duck. During 1988-1997, demand for animal feed rose by an annual 9.2 per cent from 4.7 million tons in 1988 to 6.0 million tons in 1992 and 9.9 million tons in 1997. Demand for animal feed weakened in 1998 as a result of the recession to a total of 8.3 million tons, a drop of 16 per cent from 1997.

The demand for feed in 2000 was 9.6 million tons, and by 2001 it was 10.24 million tons. Local production accounted for 6.63 tons, the output from 88 feed mills with a total capacity of 10.2 million tons. Of the total demand for animal feed, 65% is accounted for by the ready-to-use variety and the remaining 35% by concentrated feed that farmers mix by themselves for their own use. Chicken feed has the largest percentage share of about 49 per cent of total demand, followed by swine feed with a 36% share. Of the total output, about 90% is from large-sized and fully integrated producers, of whom there are nine, Charoen Pokphand is the largest.

Opportunities: Cost of feed grain is still high, and firms are looking at ways to improve utilization, one approach is better conversion rates, through the use of feed additives. Raw material testing for GMO contamination in feed ingredients is an area of increasing potential.

4. Agricultural inputs

The main agricultural inputs, fertilizer and insecticides are primarily supplied by imports.

Fertilizers: Thailand uses 6 million tons of chemical fertilizers each year. The Thai market for agricultural chemicals was estimated at C$1,400 million in 2000. Almost all fertilizers are imported. Imports comprise about 3 million tons of compound fertilizers with the remainder as raw materials for local production of compound fertilizers. The use of fertilizers is likely to increase, one reason is the increasing number of farmers realizing the importance of utilizing enough fertilizer along with the use of high-yielding hybrid seed for better yields. It is believed that the increase in fertilizer use should continue for years to come.

Importers of chemical fertilizers must be registered in Thailand and need to apply for a license to distribute chemical fertilizers in Thailand. New chemical fertilizer products must be registered in Thailand. When

applying for registration of their products, importers must disclose the contents of their products and show their certificates of analysis. Registration of each fertilizer product will be valid for three years. Fertilizers are distributed in Thailand through three organizations:

- The Marketing Organization for Farmers (50% market share)
- The Cooperatives Federation of Thailand (30%)
- The Bank for Agriculture and Agricultural Cooperatives (20%)

Pesticides: Thailand imports about 33,000 tons of pesticides each year, consisting of approximately C$120 million worth of herbicides, C$75 million of insecticides, and C$30 million of fungicides, mostly from the United States. Thailand imports insecticides, herbicides and fungicides in a variety of forms including concentrates, pre-mixed, and finished products.

Table 3. Pesticide imports (1996)

Type	Number products	Quantity (tons)
Insecticide	79	14,401
Acaricide	6	369
Fumigant	3	82
Rodneticide	2	92
Fungicide	62	6447
Herbicide	54	23,535
Plant growth regulator	11	464
Mulluscide	3	215
Other	2	93
Total	**222**	**45,701**

Most insecticides are supplied through the Thai operation of multinationals, such as Monsanto, Rhone Poulenc, Du Pont, Cyanamid, Novartis, Agrevo, Bayer, Erawan, Pato, and Ladda.

Opportunity: Despite the need for fertilizers and insecticides Thai authorities are trying to lower their dependence on imports of these products, to lower the environmental burden and comply with requirements from trading partners. The industry is experimenting with bio fertilizers as an alternative to the chemical counterpart. Government support in developing these alternatives is expected.

5. Food ingredients

Specialty ingredients and additives for food processing in Thailand include amino acids, preservatives, colors and flavors, enzymes and nutritive sweeteners – some for each category produced by phase one biotechnology. Over all, the amount of food ingredient use in Thailand is relatively small compared to industrialized countries. However, expansion in the food industry will stimulate greater demand for food ingredients.

The market in 2000 was approaching that of the pre-crash, 750,000 tons. Most biotechnologically derived ingredients are imported, though there is some local production of monosodium glutamate, basic enzymes, amino acids, fructose and citric acid. There is potential for production of other compounds where local raw materials are readily available. Imports of biotech-derived additives include:

Category	Quantity (metric tons)
Enzymes	1,500
Flavours and aromas	800
Yeast & derivatives	1,400
Sweeteners	620
Essential oil & plant extracts	870

Markets for microbial and biological ingredients include the traditional products and more recently a growing dairy industry. Food processing requiring biotechnology has been practiced for centuries in Thailand; focus of modern biotechnology is to improve traditional industrial processes.

New generation processing is also in need of upgrading possibly though intervention of biotechnology. Improvement in fermented sauces is possible through improved inoccula, and processing times reduced by use of enzymes. This is an area, which is difficult to quantify given the diversity of industries employing some type of biotechnology. Fermented sauces are a major contributor to this sector, including soy, fish, vegetable, oyster and other miscellaneous Thai sauces, dairy industry - specifically active is the yogurt sector; seasoning, such as monosodium glutamate, and alcoholic beverages.

The Thai market for seasonings is estimated to be worth about C$400 million. Of this, fish sauce contributes C$200 million; seasoning powder C$50million; seasoning sauce C$60 million; fermented soy sauce and soybean paste C$35 million; chili sauce and oyster sauce C$20 million each; and tomato ketchup and distilled vinegar C$15 million.

There is demand for novelty sweeteners in Thailand, but these products are difficult to import as they are classed as sugar related and as such come under the requirements governing the trade in sugar compounds.

Key industry players include overseas suppliers such as Roche (mainly through its affiliate, Rovi Thai), BASF, FFA, and Franco-Pacific Foods. Other overseas suppliers include Monsanto and Rhone-Poulence. The locally based Japanese company, Ajinomoto (Thailand) is big in the production of the amino acids, MSG and L-lysine. Other amino acids are locally manufactured by Thai Fermentation Industry.

Other local manufacturers include EAC for enzymes; Citric Acid Co.; and Chaokhun Agro Co., producing fructose and sorbitol from cassava. Another major local company representing various overseas suppliers, and supplying a wide range of food additives is Nutrition, Ltd.

Opportunities: Many food companies are changing their buying patterns to avoid buying ingredients that may be derived from GM sources, for example soy proteins, and soybean oil. This move has been prompted by a need to avoid problems with consumers worried by genetically modified food. This is especially so for companies who export their products.

IV. Import rules and regulations

Thailand's Food and Drug Administration (FDA), an agency within the Ministry of Health, is responsible for monitoring the quality of domestic and imported foods and food ingredients. A full description of the FDA regulations and how they pertain to Canadian exporters is contained in a separate market study entitled **"Thailand's Food Import Regulations"** also on the Canadian Embassy in Bangkok web site.

Your Thai importer will generally be responsible for understanding the regulatory requirements, and obtaining the necessary product registration and licences on your behalf.

Importers are required to obtain an import license from the Ministry of Commerce. Applications must be accompanied by a supplier's order confirmation, invoice, and other pertinent documents, including packing lists, bills of landing, letters of credit (if applicable) and import entry forms

3. Contacts

Food Ingredient Importers

Following is a list of some of the major Thai food ingredient importers that are interested in being contacted by Canadian exporters.

Behn Meyer & Co (T) Ltd.

189, Moo 6

Bangkok –Chonburi Road

Ladkrabang

Bangkok 10520

Tel: (662) 326 9456, 327 4444

Fax: (662) 326 6955, 326 9701

Contact: Prasong Aramwittaya

This company is a major importer of chemicals for the food processing industry including lactose, xanthum gum, mustard flour and seed, sodium sulphite, and carrageenan. They are interested in hearing from Canadian suppliers.

BJC Specialties

Berli Jucker House

99 Soi Rubia, Sukhumvit 42 Road

Bangkok 10110

Tel: (662) 367 1111

Fax: (662) 367 1000

Contact: Chavalit Thanasahavorakun, Group Sales Manager

BJC Specialties is part of Berli Jucker Co Ltd, a large company with 5700 employees. This subsidiary is responsible for importing and distribution of food ingredients and other chemicals with sales of $40 million and is one of the key players in this sector.

East Asiatic (Thailand) Co. Ltd

Lumpini Tower, 33rd Floor

1168/98-100 Rama 4 Road, Yanawa

Sathorn Road

Bangkok 10210

Tel: (662) 679 7444

Fax: (662) 285 6706-7

Contact: Mr. Pairash K.

This is a larger trading company of 200 employees which imports a wide range of products including flavours, emulsifiers, cultures and enzymes. They recently lost their agency contract to represent the large Danish company Danisco Culture.

Erawan Chemical Co. Ltd

201/73 Moo 6, Pattanakarn Rd

Prawet

Bangkok 10250

Tel: (662) 321 4004

Fax: (662) 321 4274 / 722 0730

Email: erawth@loxinfo.co.uk

Contact: Ivan Miranda, Managing Director

This firm imports a range of food ingredients including corn and other starches, lactose and lactose products, sorbitol, and sodium carbonate. They are interested in hearing from Canadian suppliers.

Mighty International Co. Ltd

152/10 Nang Linchee Road, Sathorn

Bangkok 10120

Tel: (662) 678 3922

Fax: (662) 678 3484

Contact: Mr. Vasan Rattananupap, Managing Director

Mighty is a company of 70 people that imports food ingredients for the food processing industry, freeze dry products, flavours and colourings. The company manufactures seasoning mixes, flavour mixes and freeze dry products. They are interested in established contact with Canadian suppliers.

Nutrition LP

96 Yotha Road Taladnoi

Sampanthawong

Bangkok 10100

Tel: (662) 639 0511

Fax: (662) 236 3266

Contact: Mr. Suradje Ekpanyaskun, Managing Director

This firm of 55 people imports ingredients for the food industry, pharmaceuticals, and feed industry. They would be glad to have Canadian suppliers contact them. The MD's daughter will be attending university in Canada in fall 2000.

Oriental Siam (1978) Co., Ltd.

6 Ramkamhaeng Soi 50

Hua Mark, Bangapi

Bangkok 10240

Tel: (662) 378 0021, 732 3205

Fax: (662) 374 8560, 375 8073

Contact: Mr. Sombat, Manager

Oriental Siam has annual sales of 700 million Baht and employs 80 people. They currently import from Holland, Sweden, Germany and Japan and they distribute to industrial manufacturers. Oriental Siam currently imports dairy products (milk powder) and food ingredients (chemicals). The company would be interested in hearing from Canadian suppliers.

Thai Food & Chemical Co. Ltd

26/171 Sukhumvit Road

Bangna

Bangkok 10260

Tel: (662) 399 3059

Fax: (662) 399 3058

Contact: Ms. Duangjai Onim, Import Director

This company of 70 people is specialized in importing raw materials for the food processing industry, mainly from Europe. Products include wheat and potato starch, lactose, calcium chloride, preservatives and other food chemicals.

Vicchi Group

2811-2823 Pattanakarn Road

Suanlang

Bangkok 10250

Tel: (662) 322 5711

Fax: (662) 322 5777

Contact: Khun Vijai Visuthikraisee

Vicchi is a large trading company with 200 employees that imports products for the food processing industry; whey powder, lactose, milk powder, stabilizers, flavours, seasonings, proteins, casein and additives.

Witcorp Chemical Ltd

77/112, 27th Fl Sin Sathorn Tower

Krungthonburi Road

Klongsarn

Bangkok 10600

Tel: (662) 440 0808/26

Fax: (662) 440 0827/8

Contact: Pramote Trongjaroenchai, Deputy Managing Director

This company of 110 employees imports food additives, chemicals for the food industry and milk powder for both human and animal feed production.

Zuellig Industrial (Bangkok) Ltd

11th Floor, Ploenchit Centre

2 Sukhumvit Road

Bangkok 10110

Tel: (662) 656 8710/54

Fax: (662) 656 8767/69

Contact: Ms. Thip Neramitritthee, Product Manager

Zuellig Industrial is a large Swiss company with a major operation in Bangkok with some 1200 employees. Their trading arm, Zuellig Industrial, is seeking suppliers of ingredients to the food processing industry including modified starch, enzymes, flavours, artificial colours, and preservatives.

Potential buyers of feed ingredients

The seven largest feed mill companies in Thailand are listed below and account for about 60% of feed production. These companies all import directly and not through an importer or agent.

Betagro Agro-Group Public Co Ltd

323 Vibhavadi Rangsit Road

Laksi, Bangkok 10210

Tel: (662) 955 0555

Fax: (662) 955 0345

Centaco Group of Companies

7/3 Phaholyothin Road

Rangsit

Pathumthani 12120

Tel: (662) 516 8811

Fax: (662) 516 8633

Krung Thai Feed Mill Co., Ltd

69/6-13 Suksawatdi Road

Ratburana

Bangkok 10140

Fax: (662) 463 0040

Laemthong Corporation Ltd

Vanit Building

1126/1 New Petchburi Road

Bangkok 10400

Tel: (662) 252 3777

Fax: (662) 253 9922

Lee Pattana Feed Mill Co., Ltd
28th Floor, Wall Street Tower
33/137 Surawong Road
Bangkok 10500
Tel: (662) 632 7232
Fax: (662) 236 7751

Top Feed Mills Co Ltd
32 Moo 2
Namai
LatLumkaeo
Pathumthani
Bangkok 12140
Tel: (662) 599 1050
Fax: (662) 977 6273

Agricultural Inputs
The following have expressed an interest in biofertlisers/inputs for domestic production

P.E.P Fertlizer Co. Ltd
678/15 Bamrung Muang Road
Pomprab
Bangkok 10100
Tel (662) 224 3382
Fax: (662) 224 7206
Email: pepfert@cscom.com
Contact: Mr Somkid Sumetchotimaytha
The company is interested in biofertlizer products.

Thai Fertilizer Co., Ltd.
42 Surawongse Road
Bangkok 10500
Tel: (662) 266 9028-33
Fax: (662) 237 5232
Contact: Khun Suwit
The company are interested in biofertilizer.

Biomic Fertilizer Co., Ltd.
323 Silom Road
34th Floor, United Building
Bangkok 10500
Tel: (662) 231 1783-92
Fax: (662) 231 1801
Contact: Mr. Santhakij Yuttiban
Interested in biofertlisers.

MC Agro-Chemicals Co., Ltd.
581 Moo 4, Bangpoo Industrial Estate Soi 12
Sukhumvit Road
Samutprakarn 10280
Tel: (662) 709 4517-9
Fax: (662) 709 4780
Contact: Mr. Saman Intavimolsri
Interested in biofertlisers.

MPP Chemical Co., Ltd.
144/1-2 Soi Sahamit, Mahaprutharam Road
Bangkok 10500
Tel: (662) 266 8373
Fax: (662) 266 5614
Contact: Mr. Suksan Rojanasamit
Interested in biofertlisers.

Rojanakasikit Fertlizer Co., Ltd.
630/32-34 Phra Pinklao Road
Bangkok 10700
Tel: (662) 434 0080-9
Fax: (662) 433 6633
Contact: Mr. Piya
Interested in biofertlisers.

Teparak Chemi Kaset Co., Ltd.
21/772 Bangna - Trad Road at Km. 2
Bangkok 10260
Tel: (662) 398 7655, 398 2542
Fax: (662) 749 0386, 398 2450
Contact: Ms. Apasree Uthes
Interested to talk with Canadian companies regarding biofertilizers.

The following are interested in bio-insecticides are components for domestic production:

Ladda Co. ltd
99/220 Tessabansong Kroah Road
Chatuchak
Bangkok 10900
Tel: (662) 954 3120
Fax: (662) 954 3128
Email: pichaim@ksc11.th.com
Contact: Mrs Vanida Angsuphan (Managing Director)

Animal Health Products

Over 60-70% of the market for animal health and related products is controlled by CP group through:

Bangkok Vet Drug
37/81-82 Soi Yenjit
Chan Road
Thung Wat Don
Bangkok 10120
Tel: (662) 675 9490
Fax: (662) 675 9497
Contact: Mr Somsak

Advance Pharma Co Ltd.
47/1-4 Soi Chan Road
Thung Wat Don
Sathorn
Bangkok 10120
Tel: (662) 675 8800
Fax: (662) 675 9436
Contact: Mr Yuthana

Other companies handling animal health products are:

A.I.P CO., LTD.
Manager : Mr. Somkiat Banthonsade
Address : 77/75 Factoryland Soi 8, Moo 12, Buddha Mondhol 5 Rd., Rai-Khing, Sampran, Nakornpathom 73210
Tel: (662) 431 0360-2
Fax: (662)431 2493
E-mail Address: aip@mail.thailand.net

Chanaphant Industry Co Ltd
33 – 35 Rama IV Road
Pomprab
Bangkok 10100
Tel: (662) 223 9311
Fax: (662) 225 4803
Contact: Khun Vilia

M & H Manufacturing Co. Ltd.
41, Sukhumvit Road
Amphur Muang
Samutprakarn 10270
Tel: (662) 394 2141
Fax: (662) 384 3602
Contact: Mr Suvat

Eisai (Thailand) marketing Co. Ltd.
Diethelm Tower A
6th Floor
93/1 Wireless Road
Bangkok 10330
Tel: (662) 256 6296
Fax: (662) 256 6299
E Mail: thaweesi@ksc15.th.com

Dalichi Pharmaceutical Co. Ltd
Bangkok Representive Office
Boonmitr Building
10th Floor
138 Silom Road
Bangkok 10500
Tel: (662) 236 7485
Fax: (662) 236 2656
Contact: Mr Suthas Phongprasert

Centaco Group of Companies
7/3 Phaholyothin Road
Klongnueng
Pathumthani 12111
Tel: (662) 516 8811
Fax: (662) 516 8633
Contact: Mr Pipit Luechatorn

Atlantic Trading Co. Ltd
2038, Sukhumvit Raod
Prakhanong Road
Prakhanong
Bangkok 10250
Tel: (662) 311 0111
Fax: (662) 331 5697
Contact: Mrs Suchitra

Seed Companies

Abacus Seeds Co., Ltd.
1/727 Gardenhome Plaza
T. Kukot
A. Lumlookka
Pratumthani 12130
Tel: (662) 993 6003/4
Fax: (662) 993 6005
Email: abcseeds@ksc.th.co
Contact: Mr. Apichai Kusumarn, Managing Director

Bangkok Seed Industry Co.
Trok Chan Building
36 Chan Road
Thung Wat Don
Sathorn
Bangkok 10120
Tel: (662) 675 8800
Fax: (662) 675 9413
Contact: Mr Suchart Tadathamrongvej
Mainly deal with corn, sorghum, bean seed.

Cargill Siam Ltd.
130-132 Sindhorn Tower 3, 18 Flr
Wireless Road, Lumpini
Pratumwan
Bangkok 10330
Tel: (662) 263 2929
Fax: (662) 263 2942
Contact: Mr. Charuk Kuntanarumitkul, Regional Seed Manager

Charoen Pokphand Seed Co., Ltd.
Trok Chan Building
36 Yenchit Chan Road
Thung Watdon
Sathorn
Bangkok 10120
Tel: (662) 711 4661
Fax: (662) 675 9479
Contact: Mr Sumate Pinyosnit

Chia Tai Co. Ltd.
295/303 Songsawat Road
Bangkok 10100
Tel: (662) 233 8191
Fax: (662) 639 6063
Email: info@chiataigroup.com
Website: http://www.chiataigroup.com
Contact: Mr Vinich Chuanchai
The company undertakes research for hybrid tropical vegetable varieties. They have 5 research stations: 3 in Thailand, 1 in China and 1 in Indonesia. Specialists in hybrid fruit vegetables such as Watermelon, Melon, Hot Pepper, Cucumber etc. and Tropical Brassica crops.

Petoseed Thailand
Itthiporn Building 7th Floor, Office B
202/22 Moo 4
Chaengwatana Rd
Taladbangkhen
Laksi
Bangkok 10210
Tel: (662) 973 3927
Fax: (662) 973 3935
Contact: Mr Choolit

East-West Seed Company
P.O. Box 3
Sainoi – Bang Bua Thong Road
Bang Bua Thong,
Nonthaburi 11110
Tel: (662) 923 7636
Fax: (662) 923 7794
E-mail: info.th@eastwestseed.com
Website: http://www.eastwestseed.com
Contact: Mr Bert Felt
Vegetable and flower seed.

Limagrain Vegetable Seeds Asia
Olympia Thai Building, 4/F.
956, Rama IV Road
Bangkok 10500
Tel: (662) 636 2521
Fax: (662) 636 2524;
Email: pfabre@loxinfo.co.th
Website: http://www.limagrain.com
Contact: Mr. Philippe Fabre, Asia Business Unit Director

Lion Seeds Ltd., Part.
32/10 Moo 3
Buddhamondhon Sai 1 Ban Ramard
Talingchan
Bangkok 10170
Tel: (662) 887 6382-5
Fax: (662) 887 6381
Email: info@lionseeds.com
Website: http://www.lionseeds.com
Contact: Mrs. Suvanee Prathuangsit, Manager
Produce quality hybrid and OP vegetable seed

Novartis (MPL) Ltd.
159/30 Soi Vibhavardi 62
Talat Bangkent Laksi
Bangkok 10210
Tel: (662) 5511046, 973-5555
Fax: (662) 552 5411, 552 2105
Contact: Dr. Kriangsak Suwantaradon, Seed Business Manager

Pioneer Hi-Bred (Thailand) Limited
60/1 Monririn Bldg. 5 F. Rm. 501
Phaholoyothin 8 (Sailom)
Phayathai
Bangkok 10400
Tel: (662) 270 1490
Fax: (662) 271-4369
Contact: Mr. Montri Simakrai, Director

Plant Breeding and Seed Science Research Center
Boonrawd Brewery Co., Ltd.
195 Moo 3, Takoh Subdist
Maesuay
Chiangrai 57180
Tel: (6653) 656 171
Fax: (6653) 656-169
Contact: Dr. M.L. Anothai Choomsai, Manager

Seng Heng Huat Seed Co., Ltd.
64 Chakrapetch Road
Pak Klong Talad
Bangkok 10200
Tel: (662) 221 7524
Fax: (662) 225 8358
Contact: Mr. Somsak Srirawewongsa, Managing Director

Thai Seeds & Agriculture Co., Ltd.
1/1 Phaholyothin
40 Jatujak
Bangkok 10900
Tel: (662) 940 1698
Fax: (662)561 1643
Contact: Mrs. Chamnian Nilpraphai, Managing Director
Vegetable and flower seeds, specializes in vegetable F1 hybrid seed (Solanaceous: tomato, eggplant, sweet and hot pepper; Cucurbits: cucumber, melon, squash, watermelon) and open pollinated vegetables.

Uniseeds Co., Ltd.
1/87-88 Phaholyothin Rd,
Soi 40
Chatuchak
Bangkok 10900
Tel: (662) 579 1929
Fax: (662) 561 1367
Contact: Mr Choochart Tanangsnakool

Other useful contacts:

Canadian Embassy
Commercial Division
15th Floor, Abdulrahim Place
990 Rama IV Road
Bangkok 10500, Thailand
Tel: 662 636-0540
Fax: 662 636-0568

Ministry of Agriculture and Cooperatives
Department of Livestock Development
Thanon Phaya Thai
Bangkok 10400
Tel: (662) 251-5136-8
Fax: (662) 251-5790

Promotional venues:

Following is a listing of the agricultural trade shows in Thailand that might be appropriate for attendance or participation by Canadian feed ingredient exporters.

AGASIA
Exhibition covering all aspects of agriculture.
Date: Bi-yearly - November
Organizer: Reed Tradex Company
323 Office Villa, Bond Street
Tambon Bangpood, Pakkred
Nonthaburi 11120
Tel: (662) 503 2100
Fax: (662) 503 496

VIV ASIA
International trade fair for intensive animal products & processing.
Date: March, 2003
Organizer: NCC Management and Development Co. Ltd.
Queen Sirikit Nat'l Convention Center
Bangkok
Tel: (662) 229 3000
Fax: (662) 229 4253

Victam Asia
Feed ingredients, grain processing
Date: November
Tel: 31 33 246-4404
Fax: 31 33 246-4706

Association:

Thai Frozen Foods Association

Address: ITF Bldg, 13th Fl 160/194-7 Silom Rd,
Bangrak
Bangkok 10500
Thailand

Tel (66 2) 23 55622

Fax (66 2) 23 55625

Thai Sugar Manufacturing Association

Address: Gypsum Metropolitan Tower,
20A th Fl 539/2 Sri Ayudhya Rd,
Rajtavee
Bangkok10400
Thailand

Tel: (66 2) 64 25248

Fax: (66 2) 64 25251

Thai Tapioca Flour Industries Association

Address: LPN Tower, 7th Fl, Room 7C, 216/5
Nanglinchi Rd,
Chongnonsee, Yannawa
Bangkok 10120
Thailand

Tel: (66 2) 28 54285

Fax: (66 2) 28 54286

Soybean and Rice Bran Oil Processor Association

Address: 83/32 Ngamwongwan Rd,
Donmuang
Bangkok 10210
Thailand

Tel: (66 2) 58 08290

Fax: (66 2) 58 07438

Thai Fruits and Vegetables Exporters Association

Address: 3 Sol Archara, Suthisarn Rd, Huaykwang
Bangkok 10320
Thailand

Tel: (66 2) 27 47291

Fax: (66 2) 27 47831

Thai Rice Association

Address: 89 Sol Yotha 1, Charoenkrung Rd,
Talad-Noi,
Sampanthawong
Bangkok 10100
Thailand

Tel: (66 2) 23 49187

Fax: (66 2) 23 73184

Thai Sugar Producers Association

Address: Thai Ruam Toon Bldg, 8th Fl
79 Krungkasem Rd,
Wat Sommanas, Pomprab
Bangkok 10110
Thailand

Tel: (66 2) 28 20990

Fax: (66 2) 28 10342

The Thai Tapioca Trade Association

Address: Sathorn Thani II Bldg, 20th Fl 92/58 North
Sathorn Rd, Silom
Bangrak
Bangkok 10500
Thailand

Tel: (66 2) 23 40620

Fax: (66 2) 23 66084